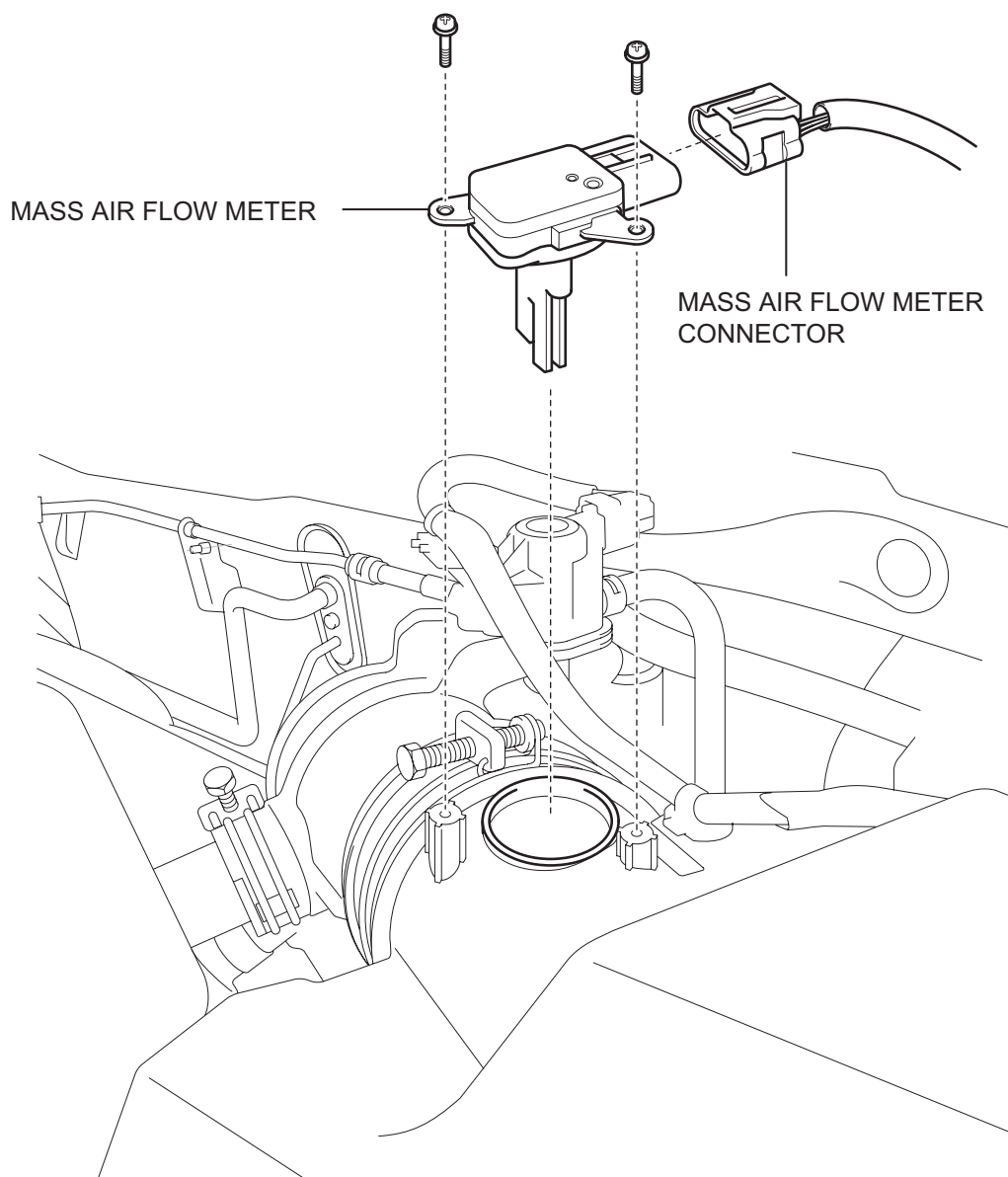


MASS AIR FLOW METER

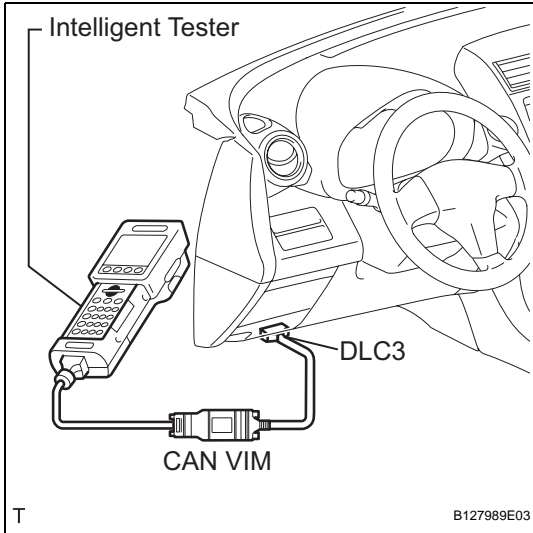
COMPONENTS



ON-VEHICLE INSPECTION

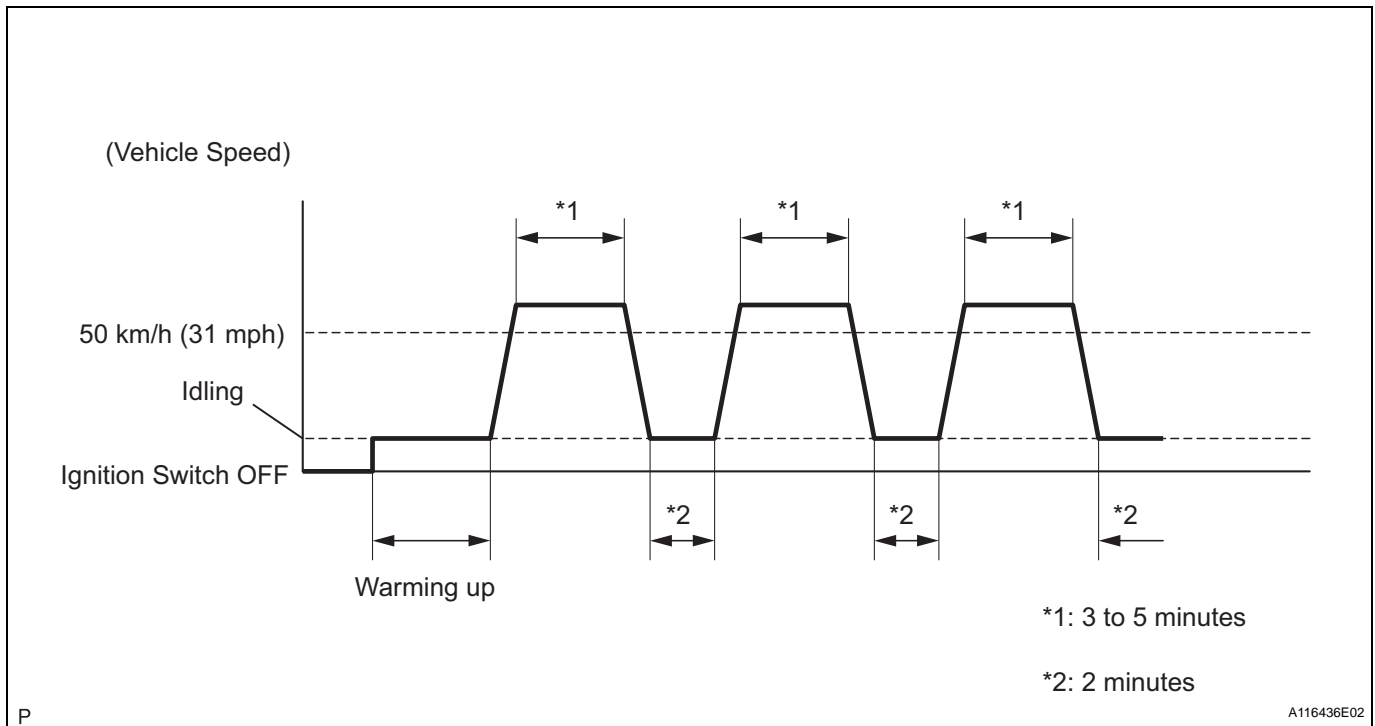
NOTICE:

- Perform the MAF meter inspection according to the procedures below.
- Only replace the MAF meter when both the LONG FT#1 value and MAF value in the DATA LIST (with the engine stopped) are not within the normal operating range.



1. INSPECT MASS AIR FLOW METER

- Perform confirmation driving pattern.
 - Connect the intelligent tester to the DLC3.
 - Turn the ignition switch ON.
 - Turn the tester ON.
 - Clear the DTCs (see page ES-35).
 - Start the engine and warm it up with all accessory switches OFF until the engine coolant temperature is 75°C (167°F) or more.
 - Drive the vehicle at 50 km/h (31 mph) or more for 3 to 5 minutes*1.
 - Allow the engine to idle for 2 minutes*2.
 - Perform steps *1 and *2 at least 3 times.

ES


- Read the value using the intelligent tester (LONG FT#1).
 - Select the following menu items: DIAGNOSIS / ENHANCED OBD II / DATA LIST / PRIMARY / LONG FT#1.
 - Read the values displayed on the tester.
Standard value:
Within -15 to +15%

If the result is not within the specified range, perform the inspection below.

- (c) Read the value using the intelligent tester (MAF).

NOTICE:

- Turn off the engine.
- Perform the inspection with the vehicle indoors and on a level surface.
- Perform the inspection of the MAF meter while it is installed to the air cleaner case (installed to the vehicle).
- During the test, do not use the exhaust air duct to perform suction on the exhaust pipe.

- (1) Turn the ignition switch to ACC.
- (2) Turn the ignition switch ON (do not run the engine).
- (3) Turn the tester ON.
- (4) Select the following menu items: DIAGNOSIS / ENHANCED OBD II / DATA LIST / PRIMARY / MAF.
- (5) Wait 30 seconds, and read the values on the intelligent tester.

Standard condition:

Less than 0.45 g/sec.

- If the result is not as specified, replace the MAF meter.
- If the result is within the specified range, inspect the cause of the extremely rich or lean air-fuel ratio (see page [ES-147](#)).

REMOVAL

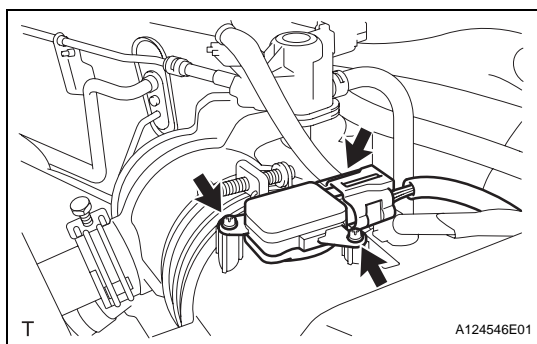
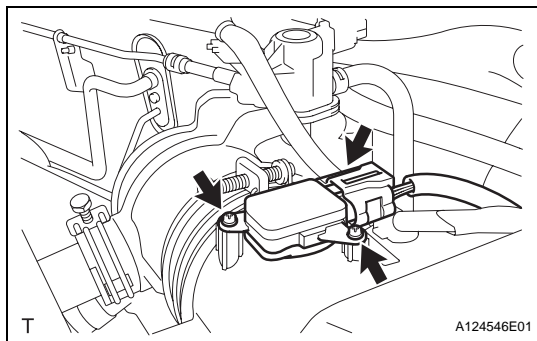
1. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pretensioner activation.

2. **REMOVE MASS AIR FLOW METER**

- (a) Disconnect the mass air flow meter connector.
- (b) Remove the 2 screws and mass air flow meter.



INSTALLATION

1. **INSTALL MASS AIR FLOW METER**

- (a) Install the mass air flow meter with the 2 screws.

NOTICE:

Make sure that the O-ring is not cracked or jammed when installing it.

- (b) Connect the mass air flow meter connector.

2. **CONNECT CABLE TO BATTERY NEGATIVE TERMINAL**